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ABSTRACT

Two reports are presented in this document prepared for the Colorado State Legislature. The first, a zero-base budget review, presents a summary of the characteristics of the student population served by Colorado's 11 junior colleges. The summary includes statistics on age range, state of residence, gender, ethnic background, types of financial aid received, and credit hour enrollment. Summary budget data are presented for the state system including a description of the budgetary status of the system for fiscal year (FY) 1978-79, and a list of summary conclusions based on the zero-base budget review reports submitted by the individual colleges. The second document, a budget overview for FY 1978-79, consists of an introduction and six narrative sections dealing with: (1) the development of the comprehensive community junior college in general and its specific development in Colorado; (2) the role, mission, goals, and objectives of the Colorado state system of community colleges; (3) a description of systemwide organization and operation; (4) an account of systemwide accomplishments; and (5) a discussion of budgeting in general as well as a description of the zero-base budget review process as it operates within the Colorado system. Several exhibits in the form of charts, tables, and maps accompany the reports. (DR)

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ED174270

FY 1978-79

ZERO-BASE BUDGET REVIEW

THE COLORADO STATE SYSTEM OF COMMUNITY AND JUNIOR COLLEGES

- A SUMMARY -

COLORADO STATE BOARD
COMMUNITY COLLEGES
and
OCCUPATIONAL EDUCATION

JC 790 328

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Prepared by:

The Division of Community Colleges
Terrence A. Tollefson, Director

January, 1979

RICHARD D. LAMM, Governor

STATE BOARD FOR COMMUNITY COLLEGES AND OCCUPATIONAL EDUCATION

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January 9, 1979

Joint Budget Committee
Colorado General Assembly
341 State Capitol Building
Denver, Colorado 80203

Members of the Joint Budget Committee:

A systemwide zero-base budget review summary is forwarded herewith in response to C.R.S. 1973, Section 2-3-20 (2) and a letter, dated July 24, 1978, from Representative Arthur C. Herzberger, then Chairman of the Joint Budget Committee.

The zero-base reviews of the colleges have consumed a substantial amount of staff time and resources, both on the part of the colleges and the State Board's Division of Community Colleges. We believe that the resultant reports, in tandem, represent a valid review of the appropriated operating base of the State's system of community and junior colleges.

In closing, we wish to express our appreciation for the assistance provided by Mr. Andrew Wallach of your staff. If you should have additional questions or require further clarification of this report or those submitted by the colleges, please feel free to call upon us.

Sincerely,

Terrence A. Tollefson

Terrence A. Tollefson
Director: Community Colleges

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enclosure

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SECTION I

INTRODUCTION

Section 2-3-20 (2), 1973 C.R.S., states that a zero-base budget analysis shall be completed for each State agency or institution a minimum of once every five years. Pursuant to this statute and at the request of Representative Arthur C. Herzberger, then Chairman of the Colorado General Assembly's Joint Budget Committee, in a letter dated July 24, 1978, the Colorado state system community and junior colleges have conducted zero-base budget reviews of their FY 1978-79 operations and submitted reports thereon.

The purpose of this document is to summarize the institutional reports for subsequent analyses at the State level. Additionally, an earlier document, entitled FY 1978-79 Budget Overview, was prepared and submitted to provide systemwide and historical perspectives. These efforts seem warranted because of the like nature of these institutions, and the facts that they are part of and operate as a system within the larger Colorado postsecondary education community. It should also be noted, here, that the Colorado Community Junior College FY 1979-80 Budget Digest is considered an important supplement to these documents and the institutional reports, as are the various FY 1979-80 operating budget requests and the zero-base budget reviews of capital outlay.

SECTION II

CLIENTELE CHARACTERISTICS

Exhibit 1 presents a summary of the characteristics of those served by Colorado's state system community junior colleges in appropriated programs. The following data merit specific attention:

1. According to A Plan and a Process for Postsecondary Education in Colorado, 1978-79 Through 1982-83, Access and Quality, prepared by the Colorado Commission on Higher Education:

   a. Over 500,000 adults, or approximately 20% of the State's total population, do not possess the equivalent of a high school diploma;

   b. Worker demand will exceed supply in 18 of 22 occupational areas requiring a postsecondary education of two years or less during the period 1977-1982, and the need for retraining and upgrading opportunities will continue as a result of economic development and technological change; and

   c. Population growth is projected in the service areas of four of the State system institutions and three local district colleges; additionally, two other State system college service areas may experience growth related to industrial development, one of which could witness a significant population increase, and a third service area is now under review by industry;

2. Based upon a review of institutional clientele characteristics:

   a. The majority of students served are part-time (i.e. credit hour loads of less than 12 hours in a term). The recent trend towards greater numbers of part-time, as opposed to full-time, students is, we believe, reflective of a strong Colorado economy. This trend also has fiscal implications in terms of headcount-intensive support functions (e.g. counseling, business office, student records, etc.);

   b. The largest number of students served fall within the 21-29 year old age range, with a median age of 27. This is significant in that approximately 17% of the State population was in this age range in 1976, and the range is projected to increase by nearly 40% in 1985. Other students are distributed almost equally above and below this age range;

   c. 91.5% of enrolled student headcount are Colorado residents. These students generate 92.2% of student FTE;

d. The male/female mix is approximately 50/50. In 1976, males comprised nearly 51% of the State's total population. Thus, it would appear that the two-year sector has been responsive to the needs of women now seeking postsecondary educational opportunities;

e. 17.5% of the students served by the State system community junior colleges are minority. This approximates the State-wide population composition;

f. 31% of financial aid applicants come from families earning less than $3,000 per year, and 51% are from families earning less than $6,000; and

g. In terms of credit hour production, academic programs comprise 40.4%, vocational programs 55.2% and remedial/ developmental programs 4.4%.

EXHIBIT 1

STATE SYSTEM COMMUNITY JUNIOR COLLEGES

CLIENTELE CHARACTERISTICS

A. Clientele -- Student Headcount

Average Student Headcount (Academic Year, FY 1978-79)	29,858
Full-time Students	41.1%
Part-time Students	58.9%
Median Age	27
Residents	91.5%
Non-residents	8.5%
Male	50.0%
Female	50.0%
Minority	17.2%
Non-minority	82.8%
Family Income Category (Financial Aid Applicants):	
$ 0 - $ 2,999	31.0%
$ 3,000 - $ 5,999	20.0%
$ 6,000 - $ 7,999	10.0%
$ 8,000 - $ 9,999	9.0%
$10,000 - $11,999	7.0%
$12,000 and over	23.0%

B. Clientele -- Student FTE

Fiscal Year FTE - Appropriated FY 1978-79	21,020.0
Resident	92.2%
Non-resident	7.8%
Academic/Vocational/Remedial	40.4%/55.2%/4.4%

SECTION III

SUMMARY BUDGET DATA

In this section some summary budget data are presented for the State system of community junior colleges. The section is divided into two parts. The first contains a brief description of the current (FY 1978-79) budgetary status of the State system. The data included therein and some related observations are important, in that FY 1978-79 appropriations comprise the base or 100% activity level for the zero-base budget reviews. Additional information in this regard is presented in the "Colorado Community Junior College FY 1979-80 Budget Digest," the various operating budget request documents and the institutional zero-base budget reviews.

The second part of this section includes summaries of the zero-base budget review reports submitted by the colleges. Again, some observations shall be made concerning the systemwide impacts of operating at the 50% and 70% activity levels. Additionally, FY 1979-80 requests for the system shall briefly be reviewed.

A. Current Status -- State System Institutions

1. The current year appropriated enrollment level for the system is 21,020 FTE.

2. Whereas FTE enrollments are now relatively stable, the number of student headcount served has increased. Thus, more part-time students are being served, a fact which appears to be heavily influenced by the low unemployment rates in Colorado.

3. Approximately 94% of the students served in the system are residents. Therefore, State funds are almost solely dedicated to providing postsecondary educational services to Colorado citizens, especially when considering nonresident tuition policies.

4. Appropriate expenditures, including estimated needs for central pot allocations, equal $36,116,411 in FY 1978-79.

5. The weighted average operating cost per FTE student is currently $1,639, $639 or 28.1% less than in the baccalaureate sector.

6. The weighted average student/professional staff ratio in resident instruction is 20.4/1 or 12.1% higher than in the baccalaureate sector.

7. Community college FTE enrollments have increased by 59.2% since FY 1972-73, or 9.9% per year on the average.

8. The average number of student headcount served per term has increased by 58.0% since FY 1972-73, or an average growth of 9.7% per year.

9. The weighted average cost per FTE student has increased by 44.6% since FY 1972-73, or by an average of 7.4% per year.

10. The weighted average general fund support per FTE student has increased by 30.8% since FY 1972-73, or by an average of only 5.1% per year.

11. Workloads in support areas, as illustrated by the following changes in average student headcount-to-FTE staff ratios, have increased dramatically since FY 1972-73:

    a. An increase of 17.2% in general administration;

    b. An increase of 26.6% in student services; and

    c. An increase of 19.9% in libraries.

    Additionally, workloads have increased by an even greater amount than these data imply, since the average student headcount factor obscures the fact that, in the two-year sector, many different individuals are served in comparison to this data element than in other sectors. For example, serving one student in each of three quarters requires somewhat less effort than serving three different individuals during this time period, even though both instances equate to one (1) on an average student headcount basis.

12. Capital outlay appropriations have declined in total by 10.6% since FY 1972-73 and by 43.9% on a per FTE student basis.

13. GSF maintained for appropriated programs per FTE staff in physical plant operation and maintenance have increased by 6.2% since FY 1972-73.

14. General fund monies allocated to the State system community junior college for operations have increased by 7.6% less than the increase in total general fund allocations since FY 1972-73. This has resulted in the system's share of the State general fund declining by 4.2% during this time period.

15. Colorado full-time resident tuition rates have increased by an average of 10.9% per year since the beginning of the decade.

16. There has been an increase in the consumer price index of 64.6% from July 1972 to July 1978, or an average increase of 10.8% per year.* Thus, "real" per FTE support in terms of units purchased has therefore declined during this period in the two-year sector (see items 9 through 13 for comparison). This problem is further compounded by the double digit inflaction currently being experienced.

B. Zero-Base Budget Review, A Summary of Institutional Reports

Exhibits 2-5 present summaries of the State system community junior colleges' decision packages for the 50%, 70%, 100% and FY 1979-80 budget request activity levels. The following observations are derived from these exhibits and the institutional reports.

1. The cost per FTE student increases as the system moves from the 100% level to the 70% and 50% levels. Total expenditures per FTE increase by 2.5% from 100% to 50%.

2. Total expenditures per staff FTE increase by 5% as the system moves from the 100% level to the 50% level and by 2.2% from 100% to 70%.

3. The impacts notes in "1" and "2" are derived primarily from two factors, the first being seniority and State Personnel Department rules and regulations and the second resulting from costs of a fixed or quasi-fixed nature.

4. The resident instruction programs consume a greater percentage of institutional budgets as the system moves from the 50% to the 70% and 100% activity levels. However, this trend is reversed at the FY 1979-80 request level because of requests for capital outlay replacement funding.

5. The following data merit comment:

   a. The colleges are requesting a 17.8% increase in general administrative funding. However, as an 11.8% increase in staffing is requested, it is important to note that most of the requests are for the purposes of complying with the rules, regulations and reporting requirements of external agencies. Compliance is now difficult and increasingly burdensome and could not occur below the 100% activity level.

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*CPI for wage earners and clerical workers in the Denver metropolitan area.

b. A 27.1% funding increase and a 22.6% staffing increase are requested in the student services category. Thus, here again, staff dominate the request. The positions are needed because of the diversity of our clientele, Section 504 requirements, increases in student "headcount/FTE" ratios and the like. The demand for student services is increasing dramatically.

c. The library and physical plant operation and maintenance areas are similar to the above. Library staff are required for purposes of implementing and/or enhancing audio-visual services and serving the unique needs of two-year college students (more interaction between students and staff is required). In the plant area, staff are required for preventive maintenance purposes to protect the State's investment in its capital assets.

6. At the 70% activity level and again in the FY 1979-80 request, remedial instruction assumes relatively greater importance than the other instructional program areas.

7. The pattern of utility expenditures in the various activity levels suggests that these costs are becoming largely fixed in nature.

8. The need for core funding in several program activities (e.g. academic instruction, general administration, plant operation and maintenance, data processing and so forth) is reflected by the fact that they consume a relatively larger percentage of institutional budgets, both in amount and staffing, at lower activity levels.

9. The colleges, in sum, elected to preserve quality in their educational offerings and support levels in moving from the 100% activity level to the 70% and 50% levels.

EXHIBIT 2

STATE SYSTEM COMMUNITY JUNIOR COLLEGES

DECISION PACKAGES, A RECAP - DISTRIBUTION OF FUNDS

	LEVEL OF ACTIVITY			
	50%	70%	100%	FY 1979-80
A. Resident Instruction:				
Academic Instruction	$ 3,871,529	$ 5,185,811	$ 7,653,193	$ 8,826,117
Vocational Instruction	5,075,546	8,127,648	12,379,433	14,772,979
Remedial/Developmental Instruction	466,215	808,701	1,120,300	1,520,984
Total, Resident Instruction	$ 9,413,290	$14,122,160	$21,152,926	$25,120,080
B. Objects of Expenditure:				
Personal Services	$14,006,438	$19,948,434	$28,849,650	$34,883,046
Operating Expenses	1,599,924	2,165,249	2,996,583	3,756,359
Travel	85,873	120,099	185,753	252,153
Learning Materials	258,649	339,749	448,220	595,000
Utilities	666,727	823,345	1,070,093	1,293,953
Capital Outlay	527,276	609,858	729,337	2,231,520
Rentals	---	---	---	38,000
Total, Objects of Expenditure	$17,238,011	$24,133,468	$34,476,084	$43,278,731
C. Program Activities:				
Academic Instruction	$ 3,871,529	$ 5,185,811	$ 7,653,193	$ 8,826,117
Vocational Instruction	5,075,546	8,127,648	12,379,433	14,772,979
Remedial/Developmental Instruction	466,215	808,701	1,120,300	1,520,984
General Administration	1,873,266	2,449,912	3,244,283	3,822,747
Student Services	1,376,058	1,977,000	2,762,929	3,510,730
Data Processing Services	685,806	799,325	970,244	1,230,124
Libraries	536,058	704,660	1,032,596	1,514,006
Learning Materials	258,649	339,749	448,220	595,000**
Physical Plant Operation & Maintenance	1,557,757	1,869,725	2,462,008	2,895,914
Utilities	666,727	823,345	1,070,093	1,293,953
Capital Outlay	527,276	609,858	729,337	2,231,520
Rentals	93,124	126,734	196,448	228,700
Extraordinary Items	---	---	---	59,938
Other Programs*	250,000	311,000	407,000	776,019
Total, Program Activities	$17,238,011	$24,133,468	$34,476,084	$43,278,731

* Includes: CCD's Center for the Physically Disadvantaged and in FY 1978-79 and FY 1979-80, Trinidad's Special Purpose Programs.

** Data are from budget documents and were developed pursuant to the budget instructions. Because of timing, the recently revised formula budgeting guidelines are not reflected therein.

NOTE: Morgan Community College data are excluded.

EXHIBIT 3

STATE SYSTEM COMMUNITY JUNIOR COLLEGES

DECISION PACKAGES, A RECAP - PERCENTAGE DISTRIBUTION OF FUNDS

	LEVEL OF ACTIVITY			
	50%	70%	100%	FY 1979-80
A. Resident Instruction:				
Academic Instruction	41.1%	36.7%	36.2%	35.1%
Vocational Instruction	53.9	57.6	58.5	58.8
Remedial/Developmental Instruction	5.0	5.7	5.3	6.1
Total, Resident Instruction	100.0%	100.0%	100.0%	100.0%
B. Objects of Expenditure:				
Personal Services	81.3%	82.7%	83.7%	80.6%
Operating Expenses	9.3	9.0	8.7	8.6
Travel	.4	.5	.5	.6
Learning Materials	1.5	1.4	1.3	1.4
Utilities	3.9	3.4	3.1	3.0
Capital Outlay	3.1	2.5	2.1	5.2
Rentals	---	---	---	.5
Extraordinary Items	---	---	---	.1
Total, Objects of Expenditure	100.0%	100.0%	100.0%	100.0%
C. Program Activities:				
Academic Instruction	22.5%	21.5%	22.2%	20.4%
Vocational Instruction	29.4	33.7	35.9	34.1
Remedial/Developmental Instruction	2.7	3.4	3.3	3.6
General Administration	10.9	10.2	9.4	8.8
Student Services	8.0	8.2	8.0	8.1
Data Processing Services	4.0	3.3	2.8	2.8
Libraries	3.1	2.9	3.0	3.5
Learning Materials	1.5	1.4	1.3	1.4**
Physical Plant Operation & Maintenance	9.0	7.7	7.1	6.7
Utilities	3.9	3.4	3.1	3.0
Capital Outlay	3.1	2.5	2.1	5.2
Rentals	.5	.5	.6	.5
Extraordinary Items	---	---	---	---
Other Programs*	1.4	1.3	1.2	1.8
Total, Program Activities	100.0%	100.0%	100.0%	100.0%

* Includes: CCD's Center for the Physically Disadvantaged and in FY 1978-79 and FY 1979-80, Trinidad's Special Purpose Programs.

** Data are from budget documents and were developed pursuant to the budget instructions. Because of timing, the recently revised formula budgeting guidelines are not reflected therein.

NOTE: Morgan Community College data are excluded.

EXHIBIT 4

STATE SYSTEM COMMUNITY JUNIOR COLLEGES

DECISION PACKAGES, A RECAP - FTE STAFFING

	LEVEL OF ACTIVITY			
	50%	70%	100%	FY 1979-80
A. Resident Instruction:				
Academic Instruction	211.6 FTE	287.2 FTE	422.3 FTE	437.2 FTE
Vocational Instruction	274.4	440.0	676.3	725.3
Remedial/Developmental Instruction	28.2	47.0	65.9	82.4
Total, Resident Instruction	514.2 FTE	774.4 FTE	1,164.5 FTE	1,244.9 FTE
B. Program Activities:				
Academic Instruction	211.6 FTE	287.2 FTE	422.3 FTE	437.2 FTE
Vocational Instruction	274.4	440.0	676.3	725.3
Remedial/Developmental Instruction	28.2	47.0	65.9	82.4
General Administration	83.4	113.0	151.9	169.8
Student Services	72.0	107.3	155.7	190.9
Data Processing Services	28.0	33.5	43.1	48.7
Libraries	32.9	45.2	67.7	96.4
Physical Plant Operation & Maintenance	95.7	117.5	161.4	183.9
Other Programs*	16.6	21.5	25.8	47.8
Total, Program Activities	842.8 FTE	1,212.2 FTE	1,770.1 FTE	1,982.4 FTE

* Includes: CCD's Center for the Physically Disadvantaged and in FY 1979-80, Trinidad's Special Purpose Program request.

NOTE: Morgan Community College data are excluded.

EXHIBIT 5

STATE SYSTEM COMMUNITY JUNIOR COLLEGES

DECISION PACKAGES, A RECAP - PERCENTAGE DISTRIBUTION OF FTE STAFFING

	LEVEL OF ACTIVITY			
	50%	70%	100%	FY 1979-80
A. Resident Instruction:				
Academic Instruction	41.2%	37.1%	36.3%	35.1%
Vocational Instruction	53.4	56.8	58.1	58.3
Remedial/Developmental Instruction	5.4	6.1	5.6	6.6
Total, Resident Instruction	100.0%	100.0%	100.0%	100.0%
B. Program Activities:				
Academic Instruction	25.1%	23.7%	23.9%	22.1%
Vocational Instruction	32.6	36.3	38.2	36.6
Remedial/Developmental Instruction	3.3	3.9	3.7	4.2
General Administration	9.9	9.3	8.6	8.6
Student Services	8.5	8.9	8.8	9.6
Data Processing Services	3.3	2.8	2.4	2.5
Libraries	3.9	3.7	3.8	4.9
Physical Plant Operation & Maintenance	11.4	9.7	9.1	9.3
Other Programs*	2.0	1.7	1.5	2.2
Total, Program Activities	100.0%	100.0%	100.0%	100.0%

* Includes: CCD's Center for the Physically Disadvantaged and in FY 1979-80, Trinidad's Special Purpose Program request.

NOTE: Morgan Community College data are excluded.

SECTION IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. Summary

Pursuant to C.R.S. 1973, 2-3-20 (2) and a letter, dated July 24, 1978, from Representative Arthur C. Herzberger, then Chairman of the Colorado General Assembly's Joint Budget Committee, Colorado's state system community junior colleges have this year conducted and reported on zero-base budget reviews of their appropriated operating budgets. This report and the previously submitted "FY 1978-79 Budget Overview" present a systemwide overview which is intended to complement the institutional analyses. As such, they contain summaries of data extracted from those reports and some additional information which we believe merit attention. It is our opinion that all of the reports, in tandem, provide a composite view of the base operations of the State's two-year postsecondary educational system.

B. Conclusions

The zero-base budget reviews of the State system of community junior colleges provided the basis for the following conclusions:

1. That the community junior colleges are the major insurers of access to postsecondary education and that at funding levels below 100%, student access would be severely curtailed, costs per FTE would increase and service levels, both qualitative and quantitative, would decline.

2. That the services provided by the colleges are important to the citizens residing in their service areas and that instruction is the number one priority in this regard;

3. That the utilization of community needs analyses is the best method for assessing the educational needs of the college's service areas, and that such analyses, in conjunction with student follow-up studies, serve as a viable means of evaluating service delivery;

4. That reductions to either a 50% or 70% activity level cannot readily occur due to legal requirements (e.g. H.B. 1234), the need to allow currently enrolled students to complete their programs, the impacts of seniority in RIF situations, Department of Personnel rules and regulations which prohibit shifts to hourly personnel, impacts on affirmative action policies and compliance therewith, and the like; and that any such reductions would result in the State's two-year college open-door policy becoming inoperative and severely impair the colleges' capabilities in meeting bond requirements in auxiliary enterprises;

5. That high student "headcount to FTE" ratios, which are prevalent in the two-year sector and indicative of the large number of part-time students served, dramatically impact certain service functions (business office, counseling, records/admissions/registration and the like), whereas appropriations are generally developed on the basis of student FTE levels;

6. That tuition rates would increase at the 50% and 70% activity levels in response to higher per FTE costs, thereby initiating a downward enrollment spiral;

7. That reductions to either the 50% or 70% activity levels would seriously impact economic development in the colleges' service areas;

8. That inflation is the primary cause of increasing per student costs, that the impact of inflation is relatively greater in expenditure categories which are or have become essentially non-controllable (e.g. utility costs), and that community junior college funding has not kept pace with escalating costs;

9. That whereas personnel costs, especially in instruction, represent the largest component of the costs of operation, such costs are overwhelmingly dedicated to instruction, as faculty efforts are directed almost solely toward classroom, laboratory and related activities;

10. That preventive maintenance programs are needed if the State's investment in its physical plant is to be protected and substantial future costs avoided;

11. That equipment replacement needs have become critical, particularly in vocational programs;

12. That an urgent need exists for core funding in the small institutions (Lamar, Morgan, Otero and Trinidad);

13. That the two-year sector is operating in a cost-effective manner and that an additional $1 invested in the community junior college yields a potentially greater benefit, in terms of taking students from where they are at matriculation to successful course and program completion, than in the baccalaureate sector;

14. That a relatively large and increasing proportion of total costs are becoming fixed or quasi-fixed in nature or beyond instituional control;

15. That the costs and workloads associated with external reporting and other accountability requirements (section 504, affirmative action, etc.) are increasing dramatically, even though they are not directly related to instruction, and that such efforts are diverting management attention from regular operations;

16. That the proposed accountability system for the State system merits implementation, as it would be the most cost-effective method of providing accountability for the utilization of State resources in the delivery of community junior college services.

17. That community junior college costs have increased at a lesser rate than in the baccalaureate sector;

18. That the added workload associated with this zero-base budgeting project and that concerning capital outlay have constrained management in addressing institutional needs of a regular, one-time or crisis nature, as these projects have occurred during a time period when internal budgeting is of utmost importance, fiscal year audits are conducted, regular operating budget documents must be prepared and so forth, and further, that this project has contributed to morale problems associated with the additional workload, the diversion of management attention and the identification of positions to be eliminated at the 50% and 70% activity levels; and

19. That significant productivity increases have been effected since FY 1972-73 and that such increase are now severely testing institutional capabilities.

C. Recommendations

1. That the FY 1979-80 operating budget requests reasonably reflect the needs of the State system community junior colleges in providing access to and the delivery of postsecondary educational services in a cost-effective manner;

2. That the small college budgeting recommendations merit implementation;

3. That H.B. 1002 merits implementation to maintain the local district colleges as a separate component of the two-year college sector, thereby avoiding significantly larger demands on the State general fund;

4. That an equipment replacement factor, based on inventory levels, be utilized in the determination of capital outlay funding;

5. That preventative maintenance programs be established where they do not currently exist or are operating at minimal levels;

6. That the accountability system be more fully funded and implemented in the State system;

7. That attention be given to and action taken on the increaseing burden of external reporting and accountability requirements for purposes of eliminating duplication in this regard and bringing the cost/benefit equation of such requirements into balance;

8. That greater reliance be placed on post-audit, internal auditing and systemwide accountability -- as opposed to pre-audit accountability in the form of the number of line items, headnotes, and footnotes -- to provide greater flexibility in coping with inflationary pressures in a period of 7% general fund spending restrictions;

9. That the zero-base budget review process be revised as follows:

   a. That a means of avoiding morale problems associated with the identification of positions which would be eliminated be considered;

   b. That the zero-base review process be considered an internal management rather than a State level tool if the process is to continue;

   c. That institutions receive earlier notification of the intent to include them in a zero-base budget review;

   d. That zero-base budget reviews occur at a time period other than during the regular budget and audit processes;

   e. That more time be allowed for completion of such reviews;

   f. That institutions not be required to participate in more than one zero-base review at any given time; and

   g. That a study be made to determine whether zero-base budget reviews yield benefits above current reporting requirements.

10. That formulae should be established and implemented in those areas where they are applicable, so that institutions will have some knowledge of funding levels for the succeeding fiscal year prior to introduction of the appropriations measure. Such action would facilitate planning for and stability of internal operations and would allow for greater attention to major issues of concern during budgetary deliberations between State and college officials.

FY 1978-79 BUDGET OVERVIEW

THE COLORADO STATE SYSTEM OF COMMUNITY AND JUNIOR COLLEGES

Prepared by:

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The Division of Community Colleges

January, 1979

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SECTION I

INTRODUCTION

Section 2-3-20 (2), 1973 C.R.S., states that a zero-base budget analysis shall be completed for each State agency or institution a minimum of once every five years. Pursuant to this statute and at the request of Representative Arthur C. Herzberger, then Chairman of the Colorado General Assembly's Joint Budget Committee, in a letter dated July 24, 1978, the Colorado state system community and junior colleges have conducted zero-base budget reviews of their FY 1978-79 operations and submitted reports thereon.

The purpose of this document is to provide a systemwide perspective for subsequent analyses of the institutional reports at the State level. A second document, to be provided in the near future, will summarize the data submitted by the colleges. These efforts seem warranted because of the like nature of these institutions, and the facts that they are part of an operate as a system within the larger Colorado postsecondary education community. It should also be noted, here, that the "Colorado Community Junior College FY 1979-80 Budget Digest" is considered an important supplement to these documents and the institutional reports, as are the various FY 1979-80 operating budget requests and the zero-base budget reviews of capital outlay.

SECTION II

THE NATURE AND DEVELOPMENT

OF THE

COMPREHENSIVE COMMUNITY JUNIOR COLLEGE

Colorado public higher education today is perhaps the one State service that is generally available to all Colorado citizens. An essential component of the higher education delivery system, and the one which has been the most instrumental in providing access to this State service, is the community junior college. The purpose of this section is to acquaint the reader with the nature of the comprehensive community junior college as it has developed nationally and in Colorado.

THE COMPREHENSIVE COMMUNITY JUNIOR COLLEGE*

The comprehensive community junior college is a relative newcomer to higher education and "represents the most advanced stage in the evolution of the junior college during the past century."[1] Although some experiments with a two-year, post-high school educational institution were conducted in the nineteenth century, the modern two-year college is generally considered to have originated at the turn of the century. "The first public junior college in the United States was established in the Joliet township high school district in Joliet, Illinois, in 1902, under the Superintendent of the Joliet Township High School."[2] At about the same time, another two-year institution was established in Goshen, Indiana, but was discontinued shortly thereafter.[3]

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*Reprinted from: James L. Buysse, A Proposal for the Presentation of Colorado State System Community Junior College Operating Budgets to Colorado State Government (Unpublished disseration in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Education, University of Illinois at Urbana-Champaign, 1977), pp. 49-53.

In 1911, several other junior colleges were established, and, by 1915, the first major period of growth had begun.[4]

The emphasis during this initial phase of development was directed toward academic programs of both a transfer and a terminal nature.[5] The transfer programs were designed for those students seeking the first two years of a baccalaureate education, and who intended to subsequently transfer to a four-year college or university. These programs, according to Koos, were offered for the following reasons:

"1. To provide opportunity to those wishing to 'round out' their general education;

2. To allow for exploration in areas of special interest;

3. To provide preparation for occupations of a semi-professional nature; and

4. To affect the level of cultural interest in the local community."[6]

Medsker notes that by 1921-22 the junior college movement comprised 207 institutions, one-third of which were tax-supported and providing educational services to half of the 16,000 students enrolled.[7] In the main, these institutions were considered an upward extension of the high school, as they were almost exclusively housed with high school units, although there did exist varying degrees of separation between the two.[8]

The second phase of development occurred between 1921-22 and World War II, with the emphasis during this period shifting toward vocational/technical programs of a terminal nature.[9] By 1938-39, 575 junior colleges, 258 of which were public, were in operation.[10] These two-year institutions were now providing a rather wide variety of academic and vocational education opportunities in their communities.

The period since 1945 has witnessed the development of the community dimension of the community junior college and a rapid rate of growth in both

the number of two-year institutions and the number of students enrolled. By 1976, there were 1,233 community colleges enrolling more than four million students in the U.S.[11] The comprehensive community junior college has now become a viable and recognized member of the postsecondary educational community. There are several elements which characterize this institution, among which are the following:

1. The comprehensiveness of the community junior college is derived from the diversity of the students it enrolls.[12]

2. It is an open-door institution, whereby it enrolls students regardless of their previous academic achievements.

3. The community junior college is a multi-purpose institution whose primary offerings are: (a) academic instruction, both transfer and terminal, (b) remedial/developmental programming in the basic skills, and (c) community service activities.

4. It is a low-cost institution, thereby facilitating access to postsecondary education for many students who could not otherwise afford the cost of further educational pursuits.

5. The two-year college is an institution in and of the community, whose implied prerequisite is a knowledge of the geographical area which it serves and the development of programs related to the educational needs contained therein.[13]

Thus, from its rather rudimentary beginnings, the comprehensive community junior college has evolved into a postsecondary educational institution which is somewhat different from the traditional higher education institution. It is also an institution which is unique to American higher education; in fact, "It may be said that the community college represents the fulfillment of the American promise to its citizens for universal education."[14] Moreover, the community junior college is uniquely qualified to assist those who are now realizing that their past education cannot sustain them in an era of dramatic technological advances.

THE COMMUNITY JUNIOR COLLEGE IN COLORADO**

The junior college movement in Colorado began in 1925 with the opening of Trinidad State Junior College and Grand Junction Junior College. The creation of these institutions was followed shortly thereafter (1927) by the achievement of junior college status on the part of the Fort Lewis School of the Colorado Agricultural College (Durango) which had been offering classes at the secondary level since 1911.

In 1933 San Isabel Junior College, a private two-year institution, began operations in Pueblo. This college became a public institution (Southern Colorado Junior College) in 1934 and was renamed "Pueblo County Junior College" three years later. Grand Junction Junior College was also renamed in 1937 (Mesa College). Additionally, another private institution (Lamar Junior College) opened its doors during that same year.

The year 1941 witnessed the creation of two new junior colleges in Colorado, LaJunta Junior College and Northeastern Junior College (Sterling). Later in that decade (1947), Lamar Junior College converted to public status.

During the 1950's, only one new two-year college was created, that being Rangely College in 1959; however, the college did not begin operations until 1962. LaJunta Junior College was renamed Otero Junior College in 1956.

Thus, at the advent of the 1960's, eight two-year colleges had been created in Colorado, seven of which had begun operations. These institutions were located around the perimeter of the State, with Pueblo County Junior College being the only such institution within the Pueblo-Fort Collins

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** Summarized from Michael McGiffert's The Higher Learning in Colorado, An Historical Study, 1860-1940 (Denver: Sage Books, 1964), passim, and the Colorado Commission on Higher Education's "A Plan and a Process for Postsecondary Education in Colorado, 1978-79 Through 1982-83, Access and Quality," pages III-28 through III-37.

corridor. Additionally, the colleges were similar in nature, as emphasized by the use of the term "junior" as opposed to "community" college, in that their focus was directed towards transfer and terminal academic programs. This fact reflected the desire of the citizenry in outlying areas of the State for access to traditional higher education programming, as such educational opportunities were not otherwise readily available. Also implied by the names of the colleges was a service role which extended beyond the boundaries of the particular communities in which they were housed. This latter point was further amplified by the changes in name at Grand Junction (Mesa), Pueblo (Pueblo County) and LaJunta (Otero).

The decade of the 1960s and the early 1970's brought dramatic enrollment increases in postsecondary education, as the State and the nation attempted to extend educational opportunity through a variety of means, such as student financial aid programming. These efforts, coupled with rapid technological change and the concomitant need for technical skills training, retraining and upgrading, also gave impetus to the most significant period of development of the two-year college in Colorado, especially in the urban areas.

As mentioned above, Rangely College began operations in 1962, albeit as a branch of Mesa College. Also in that year, Fort Lewis was authorized by the Colorado General Assembly to become a liberal arts college. In 1963 Pueblo County Junior College achieved baccalaureate status (Southern Colorado State College), although it continued program offerings at the two-year level, and Metropolitan State (Denver) was created as a two-year college. During the following year, Rangely College became an autonomous two-year institution.

The 1965-1968 period resulted in the most striking change in the nature of the Colorado community junior college movement during this era. Arapahoe

Junior College (Littleton) and Colorado Mountain College (Glenwood Springs, Leadville) were created in 1965 and began operations in 1966 and 1967 respectively. Also in 1967:

1. The Colorado General Assembly created a State system of community junior college, the State Board for Community Colleges and Occupational Education as the governing board of the system and two-year colleges in Denver (Community College of Denver) and Colorado Springs (El Paso Community College;

2. Colleges were created in Fort Morgan (Morgan County Community College) and Greeley (Aims Community College), the latter of which began operations in that same year; and

3. Baccalaureate status was achieved by Metropolitan State College.

In 1968, Lamar Junior College was renamed Lamar Community College and, together with Otero and Trinidad, entered the State system. Arapahoe Junior College followed these institutions into the State system in 1970 and changed its name at that time to Arapahoe Community College. Morgan also began operations in that year and later became a member of the State system (1973). Morgan also was renamed upon entry to Morgan Community College.

The year 1974 witnessed a change to baccalaureate status at Mesa College, although two-year programming continues, and the renaming of Rangely to Colorado Northwestern Community College. In 1978 the Colorado General Assembly designated El Paso as Pikes Peak Community College and created a technical community college in Pueblo to be comprised of the two-year component at SCSC (which had become the "University of Southern Colorado" in 1975). The history of the community junior college movement in Colorado also was capstoned in 1978 with the development of a master plan for Colorado's postsecondary educational system. This plan endorsed the role and mission of the comprehensive community junior college and the State's system of such institutions (see Section III), articulated the importance of the sector as the "foundation" of the State's postsecondary education efforts and, through the

delineation of institutional service areas, emphasized the two-year sector as the primary insurer of citizen access to postsecondary educational programming. A map noting the locations of the State's community junior colleges is presented in Exhibit 1.

EXHIBIT 1

MAP OF COMMUNITY JUNIOR COLLEGE LOCATIONS

STATE SYSTEM COMMUNITY JUNIOR COLLEGES:

Arapahoe Community College	Littleton	Joseph K. Bailey, Pres.
Community College of Denver		Robert E. Lahti, Pres.
Auraria Campus	Denver	
North Campus	Westminster	
Red Rocks Campus	Golden	
Lamar Community College	Lamar	Billie L. Henderson, Pres.
Morgan Community College	Fort Morgan	Robert F. Datteri, Pres.
Otero Junior College	LaJunta	William L. McDivitt, Pres.
Pikes Peak Community College	Colorado Springs	Donald W. McInnis, Pres.
Trinidad State Junior College	Trinidad	Thomas W. Sullivan, Pres.

LOCAL DISTRICT COMMUNITY JUNIOR COLLEGES:

Aims Community College	Greeley	Richard A. Laughlin, Pres.
Colorado Mountain College		F. Dean Lillie, Pres.
East Campus	Leadville	
West Campus	Glenwood Springs	
Colorado Northwestern Community College	Rangely	James H. Bos, Pres.
Northeastern Junior College	Sterling	Ervin S. French, Pres.

NOTES

[1]Robert Palinchak, The Evolution of the Community College (Metuchen, N.J.: The Scarecrow Press, Inc., 1973), p. 101.

[2]Coleman R. Griffith and Hortense Blackstone, The Junior College in Illinois (Urbana, Ill.: University of Illinois Press, 1945), p. 18.

[3]Leonard V. Koos, The Junior College Movement (Boston, Mass.: Ginn & Co., 1925), p. 4.

[4]Ibid.

[5]Carl E. Seashore, The Junior College Movement (New York: Henry Holt & Co., 1940), p. 13.

[6]Koos, The Junior College Movement, pp. 19-21.

[7]Leland L. Medsker, The Junior College: Progress and Prospect (New York: McGraw-Hill Book Co., 1962), p. 11.

[8]Koos, The Junior College Movement, p. 5.

[9]Palinchak, The Evolution of the Community College, p. 28.

[10]Medsker, Progress and Prospect, p. 11.

[11]Sandra L. Drake, ed. 1977 Community, Junior, and Technical College Directory (Washington, D.C.: American Association of Community and Junior Colleges, 1977), p. 2.

[12]Medsker, Progress and Prospect, p. 315.

[13]Edmund J. Gleazer, Jr., Project Focus: A Forecast Study of Community Colleges (New York: McGraw-Hill Book Co., 1973), p. 217.

[14]Ervin L. Harlacher, The Community Dimension of the Community College (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1969), p. 25.

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SECTION III

ROLE AND MISSION, GOALS AND OBJECTIVES OF THE STATE SYSTEM

A. Role and Mission

Presented below is the role and mission statement of the Colorado community junior college educational delivery system as defined in the State's postsecondary education master plan. Institutional role and mission statements are presented in the colleges' zero-base budget review reports.

Source: Colorado Commision on Higher Education, "A Plan and a Process for Postsecondary Education in Colorado, 1978-79 Through 1982-83, Access and Quality".

The Community College and Occupational Education Act of 1967 provides in Section 23-60-103, C.R.S. 1973, that "postsecondary" relates to:

> . . . instruction of students over the age of sixteen years who are not enrolled in a regular program of kindergarten through grade twelve in a public, independent, or parochial school.

The comprehensive community colleges are community oriented, and they provide opportunities appropriate to the needs of all persons. The definition of the State Board for Community Colleges and Occupational Education (SBCCOE) of an "open-door" institution is that any youth or adult may enter one of the institutions and be provided with educational opportunity that lies within his/her range of interest and ability. An open-door philosophy maintains the opportunity for students to qualify for admission regardless of past academic performance, as long as it can be demonstrated that the student can profit from such instruction. This guarantees the "right to try" regardless of age or past achievement patterns. At the same time, the open-door concept does not imply the continuation of a student at the sacrifice of quality or standards of the educational programs.

A campus for a comprehensive community college is defined as extending beyond the boundaries containing the physical plant and encompasses the entire service area of the institution. It is recommended that resources be provided at a level which will encourage delivery of educational services at locations throughout the service area.

Ordinarily the community and junior colleges offer comprehensive programs, including occupational education to prepare individuals for jobs, general and pre-professional education comparable to the first two years of the college or university, and a broad range of programs of personal and vocational education for adults. The institutions specifically are dedicated to the following goals:

1. To provide opportunity to those wishing to "round out" their general education;
2. To allow for exploration in areas of special interest;
3. To provide preparation for occupations; and
4. To increase the level of cultural interest in the local community.

The Colorado Commission on Higher Education (CCHE) believes that the two-year institutions must continually assess the needs of their service areas, and CCHE recommends reporting on the results of regular studies in this regard.

CCHE also believes that the two-year community college sector, as one of its functions, must provide a foundation for the progressive development of a total postsecondary educational system that will make it possible for Colorado to achieve both <u>quality</u> in terms of excellence of programs in all of higher education, and <u>quantity</u> in terms of the needs of our people for a wide range of educational opportunities.

Consistent with the role statement outlined above, it is recommended that the comprehensive community and junior colleges have primary responsibility for offering two-year degree programs in Colorado, and that the SBCCOE

take a leadership role in arranging for sharing of resources with the other sectors to assure that the role of the community and junior college is being fulfilled in all areas of the State. Colleges designated as area vocational schools as well as those in close proximity to area vocational schools have a special coordinating responsibility.

It is also recommended that the comprehensive community and junior colleges assume, as a part of their role, the provision of necessary remedial and preparatory work as a service to all sectors of higher education. This implies close cooperation with institutions in other classifications as well as with the area vocational schools. The role of the community and junior college sector is also assumed to include planning and cooperation with the Department of Education to assist in the provision of General Education Development (GED) programs.

B. Goals and Objectives

Institutional goals and objectives, as articulated in the colleges' zero-base budget review reports, complement those of the State system as a whole, albeit somewhat more specific in nature. The goals and objectives of the State system, which are derived from the sector role and mission statement, are noted below.

Goals:

1. Student Access:

   a. To develop a delivery system of postsecondary educational services which is accessible geographically to all Colorado residents;

   b. To remove economic barriers to the acquisition of education beyond the high school; and

   c. To insure the provision of educational services to a Colorado population heretofore unserved by postsecondary education.

2. Quality of Instruction:

   a. To promote the fulfillment of each citizen's potential through academic, career and developmental education; and

   b. To continually monitor student outcomes.

3. Response to Community Needs:

   a. To facilitate the improvement and development of community junior college service areas; and

   b. To continually assess and address the educational needs of the citizens in each college's service area.

4. Accountability:

   a. To plan, develop, coordinate and implement State policy; and

   b. To insure accountability for the utilization of State resources in the provision of community junior college services through the development of an accountability system.

Objectives, 1978-79 to 1982-83: The objectives of the State system, which are designed to facilitate achievement of these goals, include:

1. Implementation of the small college budgeting task force's recommendations.

2. Implementation of H.B. 1022 passed during the 1978 session of the Colorado General Assembly.

3. Development of equipment replacement schedules.

4. 100% funding of the resident instruction student/professional staff formula budgeting guidelines.

5. Implementation of steps to insure compliance with Section 504 requirements.

6. Implementation of the IAI accounting system.

7. Development of comprehensive, uniform student follow-up program.

8. Implementation of an accountability system.

9. Review, analysis and, where desirable, implementation of the Blue Ribbon Community College Study Commission's recommendations.

10. Implementation of recently revised degree program standards.

11. Development and maintenance of community needs analysis programs.

12. Improvement of student transferability to baccalaureate institutions.

13. Cost-effective implementation of the postsecondary education master plan's role and mission statements for the two-year sector and the institutions and the resolution of the issues concerning the two-year sector cited in that plan.

Additionally, it should be noted that a Blue Ribbon Community College Study Commission was appointed by the State Board near the end of the 1977-78 fiscal year. As one of its charges, the Study Commission was asked to conduct a review of the role and mission, goals and objectives of the State's system of community junior colleges. After meeting for six months, the Study Commission's recommendations were forwarded to the State Board in the form of a final report at the December, 1978 meeting. The State Board will review and analyze the findings and recommendations derived from the study for purposes of determining subsequent action needed.

SECTION IV

SYSTEMWIDE ORGANIZATION AND OPERATION

A. Organization

In this section, a brief review of the organization and operation of the State system of community junior colleges is presented. The State Board for Community Colleges and Occupational Education was created in 1967 as a body corporate by the 46th General Assembly (C.R.S. 1973, 23-60-104). Concurrently, the 1967 Act ". . . established a state system of community and technical colleges under the management and jurisdiction of the State Board for Community Colleges and Occupational Education" (C.R.S. 1973, 23-60-201). The Community Colleges and Occupational Education Act also provided for the appointment of ". . . a director of occupational education and a director of community and technical colleges . . ." (C.R.S. 1973 23-60-104) whose responsibilities include the employment of ". . . such professional and clerical personnel as are deemed necessary to carry out the duties and functions of their respective divisions." (C.R.S. 1973, 23-60-105).

The State Board is comprised of nine members, all of whom are appointed by the Governor, with the advice and consent of the Senate*, to six-year terms. The current membership is as follows:

Angelo M. Daurio, Chairman	Arvada
Mrs. Ellin R. Mrachek, Vice Chairman	Aurora
Marvin W. Buckels	Denver
Ernest P. Mills	Lakewood
Theodore J. Poliac	Vail
C. Stan Selby	Colorado Springs
Dr. Gwendolyn Thomas	Aurora
Fred Valdez	Pueblo
Kirk Wagner	Las Animas

* A requirement enacted during the 1978 session of the Colorado General Assembly

The staff directors of the State Board for Community Colleges and Occupational Education are Dr. Terrence A. Tollefson, Community Colleges and Mr. Lloyd Lawson (Acting), Occupational Education. For purposes of this document, attention shall be addressed toward the community junior colleges. The duties, responsibilities and programs of the Occupational Education Division are stated in C.R.S. 1973, 23-60-301 to 305.

The community junior colleges are comprised of State system and local district institutions. These colleges are alike in that each institution is responsible for the delivery of community junior college services in both its local community and the surrounding geographical areas, thereby providing relative ease of access to postsecondary education for the majority of Colorado residents. However, they differ in the manner in which they are funded by the State and in their relationship to the State Board.

State system institutions receive their education and general and capital construction spending authority directly from state appropriations contained in each fiscal year's Long (Appropriations) Bill. The governing board for these institutions is the State Board for Community Colleges and Occupational Education. The responsibilities of the Board, which are vested in the Division of Community Colleges, regarding these institutions are as follows:

> "(a) To recommend to the commission on higher education and the general assembly the location and priorities for establishment of new community and technical colleges;
>
> (b) To construct, lease, or otherwise provide facilities needed for the community and technical colleges as authorized by the general assembly; to issue in the name of the board revenue bonds and other revenue obligations in the manner, for the purposes, and subject to the provisions provided by law for state educational institutions under article 5 of this title or for junior college districts; and to refund in the name of the board revenue bonds and other revenue obligations transferred to the board or incurred by the board as

provided in this article, such refunding to be undertaken pursuant to article 54 of title 11, C.R.S. 1973;

(c) To fix the tuition and fees to be charged in the community and technical colleges. The board shall fix tuition in accordance with the level of appropriations set by the general assembly for such institutions;

(d) To approve the appointment of the chief administrative officer of each community and technical college;

(e) To recommend and review proposals for the establishment of curriculums and for major changes in curriculum, subject only to the review function of the commission on higher education relating to formal academic programs;

(f) To define the requirements of appropriate degrees and certificates and to authorize the award thereof in the community and technical colleges subject only to the review function of the commission on higher education relating to formal academic programs;

(g) To develop a plan with the governing boards of baccalaureate degree granting universities and colleges of the state which will assure maximum freedom of transfer of students between local junior colleges and community and technical colleges under the direct control of the board and such universities and colleges;

(h) To receive, review and transmit with recommendations to the commission on higher education and the general assembly both operating and capital budget requests of the community and technical colleges;

(i) To plan, in cooperation with other state agencies, the allocation of federal funds for instructional programs and student services, including funds for vocational and technical education and retraining; and

(j) To determine policies pertaining to the community and technical colleges, subject only to the functions and powers assigned by law to the commission on higher education relating to formal academic programs."

C.R.S. 1973, 23-60-202

Additionally, each State system college has a local college council comprised of residents from the geographical area surrounding the particular

institution, which serves as an interface between the State Board, the college and the community. The duties of these councils are:

> "(a) To review the qualifications of individuals seeking an appointment as chief administrative officer of the college and to emply, subject to the prior approval of the board, the chief administrative officer;
>
> (b) To recommend the annual budget to the board, through the chief administrative officer;
>
> (c) To recommend, to the chief administrative officer and through him to the board, proposals regarding occupational and other curriculums, student services, and public service activities and to adopt any such proposals approved by the board;
>
> (d) To confirm appointments to the professional staff as recommended by the chief adminstrative officer;
>
> (e) To review campus development plans and programs for individual buildings for recommendation to the board through the chief administrative officer;
>
> (f) To advise in such other areas of management as are deemed advisable to the board and, generally, to be a liaison between the college and the region it serves. "
>
> C.R.S. 1973, 23-60-206

The local district community junior colleges, on the other hand, receive their funding via entitlement grants for Colorado residents students. These colleges are governed by "college committees", which are comprised of members elected, according to statute, by the people in the local districts. The duties of the State Board, which are lodged within the Division of Community Colleges, with respect to these institutions are as follows:

1. Collection of the data necessary to make budget requests for Direct Grants to Junior College Districts (C.R.S. 1973, 23-71-301, as amended);
2. Receive and audit FTE entitlement reports from the district colleges and make grants as directed by C.R.S. 1973, 23-71-3102, as amended;
3. Refine policy and procedures, as necessary, for the administration of the Grants to Junior College Districts as provided in C.R.S. 1973, 23-71-301, as amended;

4. "(a) Exercise all powers and perform all duties now vested in the state board of education or in the commission of education with respect to local junior colleges;

(b) Review and make recommendations concerning requests by any local junior college for appropriations for capital construction before such requests are submitted to the commission on higher education and the general assembly; and

(c) Provide such junior colleges with such technical assistance as they may request."

C.R.S. 1975, 23-60-203

B. Operation

One can view the State system and local district community junior colleges as comprising subsystems of the Colorado two-year postsecondary educational sector. These groupings of institutions are alike in role and mission, services offered, diversity of clientele, service area orientation and the like. They differ, as noted earlier, in terms of funding methods and governance and, as a result, in their relationships to the State. The remainder of this discussion shall be focused on the State system colleges, although some of the following comments apply to both groups.

Tying the system together (see Exhibit 2) is the State Board's Division of Community Colleges with a currently authorized staffing level of 6.0 FTE, 4.0 of which are exempt, and a budget which comprises 0.46% of the total appropriated operating expenditures of the State system two-year colleges. The duties and responsibilities of the Division staff, which are listed below, fall within two broad categories: (1) Those involving the administration of the State system, wherein the Division functions as staff to the State Board in the exercise of its statutory responsibilities; and (2) The provision of services to the colleges, e.g., serving as an interface between the colleges and various State agencies, assisting in the performance of a variety of activities which are beyond the staffing capabilities of some or all of the

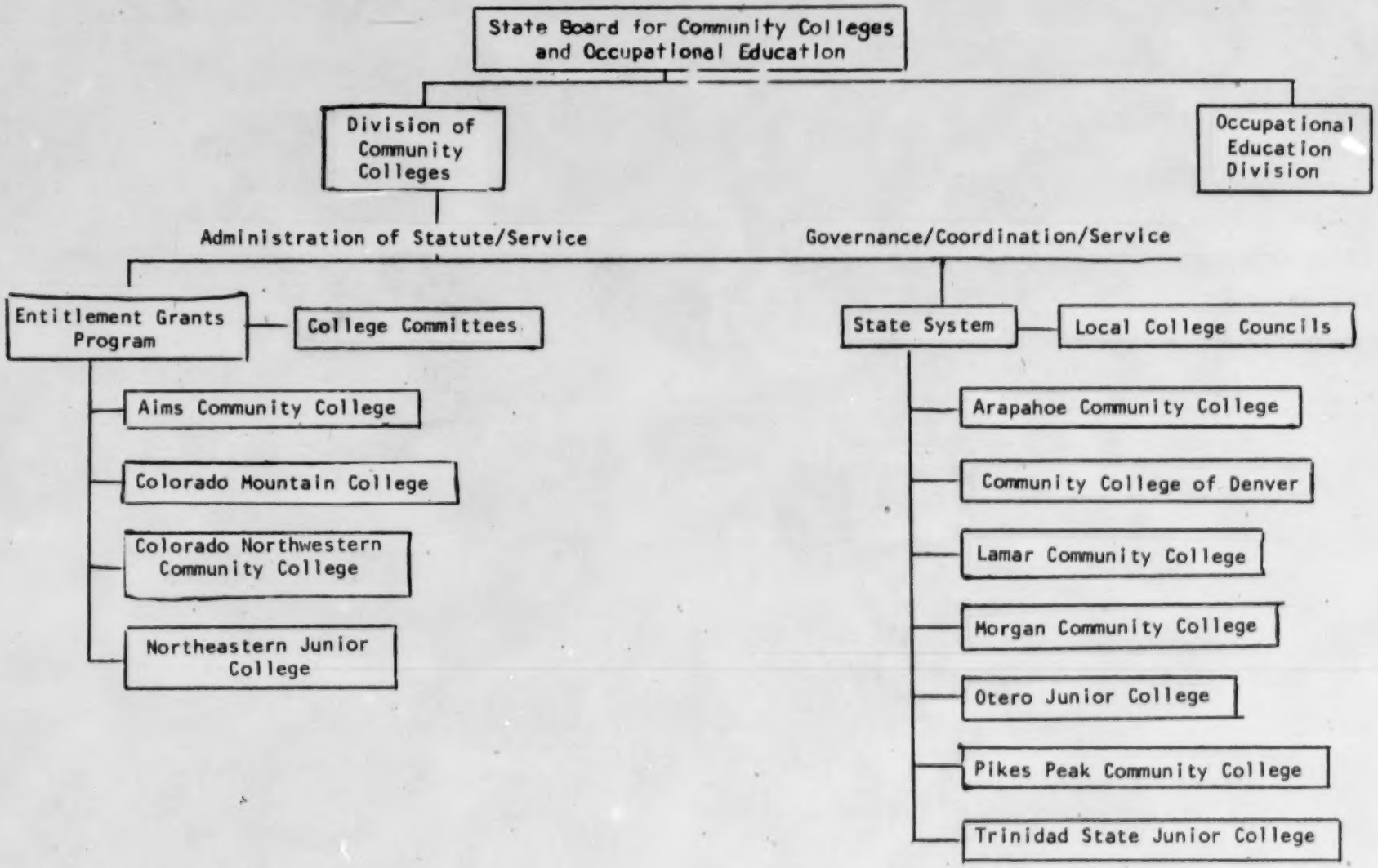
institutions (internal auditing, research, etc.) and the like. In fulfilling its role, the staff meets frequently with college officials, both in Denver and at the campuses, and engages in frequent telephone conversations. Also, the Division and institutional staff have organized several groups for purposes of addressing management issues, e.g., State System Accounting Committee, Budget Advisory Group and so forth.

The activities in which the Division staff engages include:

1. Budgeting: operating and capital construction budget request development and budgetary control;
2. Accounting: policies and procedures, audit recommendation implementation;
3. Program, physical and master planning;
4. Program and curriculum development and evaluation;
5. Contracts: leases, personnel, construction, bonds and others as required;
6. Interpretation and implementation of State policy;
7. Management Information Systems: planning, research, accountability;
8. Automated data processing;
9. Federal programs;
10. Due Process policies and procedures;
11. Enrollment reporting and analysis;
12. Development and implementation of State Board policies and procedures;
13. Administration of the FTE entitlement grants program;
14. Systemwide fringe benefits: insurance, tax sheltered annuities and related benefits;
15. Provision of information requested by various agencies; and
16. Capital construction projects.

EXHIBIT 2

ORGANIZATION OF THE COMMUNITY JUNIOR COLLEGE SECTOR



NOTE: These activities are of an ongoing nature; additionally, special issues in these and others areas arise each year and absorb significant staff time. It should also be noted that a 40% staff reduction in FY 1976-77 has severely curtailed the Division staff's capabilities, as one can readily observe by comparing the current staffing level with the above responsibilities.

Additionally, the State system community junior colleges and the Division of Community Colleges staff maintain ongoing relationships with a variety of federal, State and local agencies. Further, it has often been state in recent years that Colorado's postsecondary educational system is in chaos or out-of-control, especially as regards spending. However, a review of only the State executive and legislative groups with which the two-year colleges become involved would seem to counter this assumption. All of these groups effectively monitor, albeit in varying degrees and detail, the activities of the colleges. Such activities require a significant expenditure of time and resources on the part of the colleges and result in quasi-governance impacts on the institutions. Moreover, duplication often exists in this regard.

Based upon this review, it quickly becomes obvious that a governing board merely represents the most visible element of the governance mechanism established by the State over its postsecondary educational institutions. Of deepest concern, here, is the fact that the rules and regulations of external agencies often affect the kinds and modes of instructional offerings, even though the intent was actually directed towards administrative procedures.

Based upon a cursory review, it was noted that the following State agencies become involved:

1. Colorado Commission on Higher Education and staff: Program review and approval; budget review; financial aid administration; outreach program administration; master planning; accounting standards; coordination and oversight; etc.

2. Governing Board and staff: Administration of institutional operations

3. Joint Budget Committee and staff: Budget review; appropriation of operating and capital construction budgets; footnotes; headnotes; line items; budget execution; special projects, e.g., zero-base budget reviews; and supplemental information requests.

4. Legislative Audit Committee, State Auditor: Fiscal year audits; student FTE audits; and other audits.

5. House and Senate Education Committees: Oversight; policy; and legislation.

6. Legislative Council: Research studies on a variety of topics.

7. State Approving Agency: Veterans and related requirements.

8. State Board for Community Colleges and Occupational Education (Occupational Education Division): Occupational programs -- review and approval; student follow-up reporting; regulation; etc.

9. Attorney General's Office: Legal assistance and representation; opinions.

10. Division of Accounts and Control: Fiscal rules; accounting policies and procedures; budget execution; and central data collection and processing.

11. Division of Automated Data Processing: Budget review; planning; coordination; and administration.

12. Division of Communications: Mode of communications networking.

13. Division of Purchasing: Procedures; administration.

14. Department of Education: Recertification; local school district interrelationships.

15. Auraria Board: Administration; coordination.

16. Division of Local Government - Property Taxation: District college budgets.

17. Department of Personnel: Staffing; staff qualifications and compensation; procedures; hearings, etc.

18. Office of State Planning and Budgeting: Operating budgets; and budget execution; capital construction; indirect cost recoveries; and special projects.

19. Various boards within the Department of Regulatory Agencies: Enrollment reporting; program requirements.

20. Department of Treasury: Financial affairs.

21. Department of Labor and Employment: Employment and program needs.

22. Statutes: H. B. 1234 (Due Process): etc.

23. Baccalaureate Institutions: Articulation.

SECTION V

SYSTEMWIDE ACCOMPLISHMENTS

Presented below is a listing of some of the State's system of community junior colleges recent accomplishments. Specific institutional achievements are identified in the colleges' zero-base budget reviews and budget request documents.

FY 1974-75 Through FY 1977-78

1. Development of an internal auditing manual and several internal audit programs;
2. Development of an accounting manual and a uniform chart of accounts;
3. Completion of an information systems study and the development of recommendations related thereto;
4. Provision of community junior college services to 20,988.3 FTE and an average student headcount per term of 29,635 in FY 1977-78, or an increase in service levels of 55.6% and 56.8% respectively during the past five years;
5. Cost-benefit study of several accounting systems and the selection of a system for implementation in State system community junior colleges; initiation of accounting system implementation at Arapahoe Community College and the Community College of Denver;
6. Refinement of the State Board's FTE Guidelines;
7. Leadership role in the development of higher education FTE guidelines and participation in a variety of formula budgeting efforts;
8. Serving as principal representative in capital construction projects totalling approximately $33 million (FY 1976-77) and continued service as principal representative in ongoing capital construction projects totalling approximately $10 million and new projects of about $2 million (FY 1977-78);
9. The study of collective bargaining issues and approaches;
10. Provision of assistance to local district colleges for the development of budget request documents pursuant to statutory requirements;
11. Improvement in fiscal year audits;

12. Updating of the State Board's policy manual;

13. Analysis and resolution of the differences between the higher education (CCHE) and State Board's FTE guidelines;

14. Enhancement of the community junior college enrollment reporting system;

15. Participation in the development of a State plan for postsecondary education;

16. Development of an administrative due process policy;

17. The establishment of a "Blue Ribbon Commission" to study community colleges in Colorado after the first decade of operation; the final report is now printed; and

Planned: 1978-79

1. The assessment of programs, policies and operations after receipt of the Blue Ribbon Commission's report;

2. Continued implementation of the IAI accounting system;

3. Implementation of those sections of the State plan for postsecondary education which are apparently applicable to community colleges;

4. Participation in the development of the small college budgeting proposals and in the administration, library, physical plant and student services formula budgeting efforts;

5. Further refinement of the State Board's FTE guidelines;

6. Completion of the FY 1978-79 zero-base budgeting projects (capital outlay and community junior college appropriated operating budgets);

7. Improvement of enrollment reporting practices and the elimination of unnecessary duplication in this regard;

8. Enhancement of student follow-up processes;

9. Assistance to the State Board of Agriculture in separating "Pueblo Vocational/Technical Community College" from the University of Southern Colorado, as provided for in S.B. 81 passed by the 1978 session of the Colorado General Assembly; and

10. Development and application of associate degree designations and standards for adoption as State Board policies.

SECTION VI

BUDGETING

AND THE

ZERO-BASE BUDGET REVIEW PROCESS

Budgeting has assumed a new importance in today's world of shrinking resources. Anshen has stated that:

> "It is the essence of decision-making, therefore, to choose among alternative ends and to ration scarce means to their accomplishment. At this level of description, no significant distinction exists between profit and nonprofit organizations, or between private and public organizations. All require the ordering of goals, the analysis of their relative contributions to the great aims of the total undertaking, the development of plans, the measurement of alternative resource inputs and their relation to the progress toward objectives, rational choice of feasible ends, allocation of means, monitoring of progress, and appraisal of results. The budget process is the activity through which this work is done. The budget is the instrument, through which the process is made operational."[1]

Based upon this definition and a review of the literature, several key elements inherent in budgeting have been identified. They are:

"1. The budget must be a plan.

2. The plan must be expressed in terms of both revenues and expenditures.

3. The time period to which the budget refers, generally one fiscal year, must be specified.

4. The objectives contained in the plan must relate to the prevailing goals of the total organization.

5. The budgetary plan should evolve from the consideration of alternative courses of action.

6. The budget must be administered and controlled throughout the budget period to determine any variations from the stated plan of operation.

7. The results of the budget should be monitored and evaluated in relation to its objectives, both during and at the end of the budget period."[2]

For budgeting to prove effective in an organization, each of these elements must be included. Over the years, a variety of approaches have been designed to assist organizations in this regard. They are

1. Traditional or line item budgeting;
2. Performance budgeting, the most notable variation of which is formula budgeting;
3. Program budgeting; and
4. Zero-base budgeting.

A brief review of the history of these approaches is instructive.

"Prior to the turn of the century, there was little concern expressed about the need for budgeting of governmental resources due to the lack of serious financial pressures."[3] However, an increasing concern on the part of the public about governmental expenditures and activities led to the enactment of the Budget and Accounting Act by the Federal government (1921). Line item budgeting was then developed in response to this legislation.

Briefly, line item budgeting focused primarily on expenditure control. The line item budget displays the functional components of an organization and the objects of expenditure in each (e.g. personal services, travel and the like). Additionally, incremental analysis is generally employed in budget reviews. The primary advantages of this budgetary approach are the provisions of accountability and the furnishing of useful information for personnel management. However, this approach also has several significant limitations, including:

1. A focus on what the organization buys rather than what it does, and the concomitant failure to note that expenditures are incurred for the benefits to be derived therefrom;
2. The assumption inherent in incremental analysis that the budget base is the starting point;
3. An increase in interdepartmental competition;
4. The difficulty of relating expenditures to objectives and outputs;

5. The lack of provisions for evaluating alternative courses of action; and

6. A substantial degree of inflexibility in budget execution, especially in addressing needs of an emergency nature.

In balance, line item budgeting suffered from its almost singular emphasis on control to the exclusion of the other key elements mentioned earlier in this section, although it did represent a dramatic step forward in governmental budgetary practices. Shortly after World War II, performance budgeting was recommended by the Hoover Commission as a replacement for the line item approach. This methodology was primarily concerned with improving the efficiency of operations.

Performance budgeting attempted to relate the things purchased by an organization and the activities performed. Major elements include the development of activity classifications, performance measures and standards and performance reports. Of primary importance for analytical purposes are workload data. However, despite the fact that performance budgeting represented a significant improvement in governmental budgeting theory, its deficiencies became obvious in practice:

1. It was not generally favored by central budget staffs because of a perceived loss of control.

2. The adequacy of present service levels was not addressed.

3. A great deal of statistical analyses were required, thereby necessitating a large computational capability.

Although suffering from the same general advantages and weaknesses of performance budgeting, those associated with formula budgeting, the most common and accepted variation of this approach, merit comment. They include:

Advantages:

"1. The provision of uniformity and ease of budget preparation and presentation;

2. The provision of objective cost and productivity measures, thereby facilitating comparisons and the more equitable distribution of resources between organizations;

3. The minimization of interorganizational rivalry and conflict between state officials and agencies/institutions; and

4. The provision of more adequate levels of support for all groups, not necessarily the ones with the most political clout."[4]

Disadvantages:

1. The difficulty associated with relating a formula budget to a long-range plan;

2. Problems of linearity, especially as regards the lack of provisions for start-up costs;[5]

3. The presence of fiscal incentives which can encourage the seeking of formula loopholes;

4. The fact that formulas can relate only to quantifiable outputs; and

5. The possibility that even though equity is provided, all organizations or units thereof could be funded at equally insufficient levels.

In sum, formula budgeting appears most appropriate for those areas in which workloads are readily quantifiable and objectives commonly acknowledged.

Program budgeting succeeded the performance approach and consisted of these phases: (1) planning; (2) programming; and (3) budgeting. The emphasis on planning distinguishes program budgeting from other approaches and represents a response to one of the most serious concerns regarding the performance approach. A major contribution of program budgeting is the classification structure which attempts to link those activities with common objectives. The method of analysis comprises cost-benefit techniques and the evaluation of alternative courses of action. This involves "an attempt to maximize the present value of all benefits less that of all costs, if both can be expressed in identical units, of it this cannot be accomplished, to maximize the gain for a specified cost or the minimum of costs for achieving a specified gain."[7]

Unfortunately, however, program budgeting has not achieved its promise in higher education or in general government. Although there are a variety of advantages (namely greater familiarity with organizational programs, an emphasis on long-range planning and improved analytical techniques), the disadvantages are not easily overcome. They include:

1. The need for advanced and costly data collection and processing capabilities;
2. The difficulty of quantifying educational and governmental outcomes;
3. The inability to include all factors in the analytical phases; and
4. The difficulty associated with developing a classification structure comprised of totally independent programs.

The most recent budgetary innovation to emerge is the comprehensive or zero-base approval. In reality, it is a variation of program budgeting, with the program approach assuming the macroeconomic and zero-base budgeting the microeconomic views. Zero-base budgeting consists of two basic processes:

1. The development of decision packages which involves the analysis of organizational activities; and
2. The ranking of the decision packages in order of their importance, with the rankings generally utilizing cost-benefit analysis.[8]

It does not appear, however, that zero-base budgeting will fare any better than the program approach, because it suffers the same overriding disadvantages. Further, Peter Pyhrr, the architect of the zero-base concept, amplifies this contention by stating that "the general problems experienced in implementing program budgeting reflect some of the same type of general problems encountered in installing zero-base budgeting in Georgia, and seem to reflect the nature of the animal--government."[9]

To summarize the foregoing historical review of governmental budgeting, each approach seems to suffer from an emphasis on one key element of budgeting at the expense of the others. Further, the increasing complexity associated

with each succeeding innovation reflects a desire to develop "the" total information system. As Pyhrr notes, "The dream of the systems designer is to develop a computer system or network of systems to provide all levels of management with all information and analysis required for decision-making and effective management of operations."[10] But, although "the computer capabilities and technology exist today for the design, implementation, and integration of a total information system, the cost of designing, implementing, maintaining, and operating such a system becomes rapidly prohibitive as we complicate the system in an attempt to provide the information that management needs."[11] It is contended, here, that a more appropriate view would consider budgeting as only one of several systems needed for management purposes, but a system which must interface with the other systems if it is to be effectively utilized. Further, since a cost-effective budgeting system should contain all key elements, it would seem highly probably that such a system could be developed by selecting features of the methodologies discussed above.

In Colorado postsecondary education, budgeting has become a year-round activity with frequent overlaps between budgetary efforts directed toward two fiscal years. The current system utilizes a combination of line-item and formula budgeting techniques. Additionally, in the recent past, some efforts at program budgeting have been made, albeit unsuccessfully. The failure of such attempts reflects the problems associated with the program approach and the fact that they were merely superimposed over, rather than replacing, the system presently in use.

Most recently, zero-base budgeting has been implemented in Colorado. Here again, however, this approach is in addition to the utilization of the postsecondary education budget system. A variety of problems have resulted

during the current fiscal year with the advent of zero-base budgeting techniques in the analysis of appropriated operating budgets in the State system community junior colleges. These include:

1. It has proven difficult to define programs which are totally independent because of the many interrelationships involved. Further, as Steiner notes, programs may be defined differently depending upon the level of decision-making involved, with decisions made at higher levels (i.e., the State level) requiring more comprehensive programs.12 Unfortunately, the level of comprehensiveness required for State level analysis is not easily defined. Although, in general, the zero-base project seems to follow Steiner's concept, there do exist some important exceptions.

2. As could be predicted, quantifying benefits has proven extremely difficult and frustrating.

3. Insufficient time was provided for completion of the project. This situation resulted from the following circumstances:

   a. Relatively late notice as to the two-year sector's involvement in a zero-base budget review (July 24, 1978 -- a time when regular operating budget request development is in progress;

   b. A second zero-base budget project (capital outlay), which required substantial time and effort on the part of college staff, also had to be completed during the same time frame;

   c. The time frame overlapped that of fiscal year audits, regular operating budget processes, significant internal budgeting requirements associated with the advent of a new fiscal year and other management requirements of an ongoing or emergency nature; and

   d. Insufficient time for gathering the data necessary to adequately conduct a zero-base review.

   Because of the resultant extreme workload, staff morale became a problem, especially when attention had to be diverted from regular and necessary management activities.

4. Morale problems also were created by the identification of positions which would be reduced at the 50% and 70% levels. This resulted from the recognition by staff of the priority assigned their positions vis a vis other positions within the institutions.

5. The relationship of the 50%, 70% and 100% activity levels remain ambiguous. Further, the usage of fixed points such as these do not provide the flexibility necessary to engage in a viable zero-base budget review.

6. Based upon our experience, zero-base budgeting seems to be a better tool for internal management purposes, if carefully and properly structured, than for external reporting.

7. The cost/benefit relationship of the zero-base budget review is not readily understood vis a vis the myriad of other external reporting requirements.

NOTES

[1]Melvin Anshen, The Budget as an Instrument for Analysis, Planning, and Management (Santa Monica, California: Rand Corporation, April 1965), p. 1.

[2]James L. Buysse, A Proposal for the Presentation of Colorado State System Community Junior College Operating Budgets to Colorado State Government (Unpublished dissertation in partial fulfillment of the requirements for the degree of Docotr of Philosophy in Education, University of Illinois at Urbana-Champaign, 1977), p. 54.

[3]Ibid., p. 70.

[4]Charles E. Moss and Gerald H. Gaither, "Formula Budgeting, Requiem or Renaissance?" The Journal of Higher Education, XLVII, No. 5 (1976), p. 553.

[5]Ibid., p. 554.

[6]Ibid., p. 550.

[7]J. D. McCullough, Cost Analysis for Planning -- Programming -- Budgeting Cost-Benefit Studies (Santa Monica, California: Rand Corporation, November, 1966), p. 3.

[8]Peter A. Pyhrr, Zero-Base Budgeting: A Partial Management Tool for Evaluating Expenses (New York: John Wiley and Sons, 1973), p. 5.

[9]Ibid., p. 147.

[10]Ibid., p. 171.

[11]Ibid., p. 176.

[12]George A. Steiner, "Problems in Implementing Program Budgeting," Program Analysis and the Federal Budget, ed. by David Novick (Cambridge, Mass.: Harvard University Press, 1967), p. 310.

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